

THE CLAIMS

What is claimed is:

1. An emulsion for preservation of a metal utensil having a cutting edge during periods of non-use, the emulsion comprising
at least one of a water-soluble salt of an ether compound or a chloride compound in an amount sufficient to preserve the cutting edge of the utensil;
a hydrophobic substance in an amount sufficient to reduce water contact with the tool steel's edge; and
an alcohol in an amount sufficient to assist in solubilizing the hydrophobic substance,
wherein immersion of the cutting edge of the utensil in the emulsion preserves the sharpness of the cutting edge to facilitate longer service of utensil.
2. The emulsion of claim 1, wherein the soluble salt of an ether compound is sodium sulphate lauryl ether.
3. The emulsion of claim 1, wherein the chloride compound is cetyltrimethyl ammonium chloride.
4. The emulsion of claim 1, wherein the hydrophobic substance is selected from the group consisting of: soap base, anhydrous lanolin, and liquid glycerin, or any combination thereof.
5. The emulsion of claim 1, wherein the alcohol is selected from the group consisting of: triethanolamine, and ketostearic alcohol, or a combination thereof.
6. The emulsion of claim 1, wherein the metal utensil is selected from the group consisting of, tool steels, knives, cutlery, blades, scalpels, scissors, clippers, cutters, manicure tools, and surgical tools.
7. The emulsion of claim 6, wherein the metal utensil is fabricated from a material selected from the group consisting of stainless steel, iron, steel and alloys thereof.

8. The emulsion of claim 7 further including a reagent for reducing the deposition of iron oxide on the utensil.
9. The emulsion of claim 8, wherein the reagent is a lubricant.
10. The emulsion of claim 8, wherein the reagent is present in an amount from about 0.5 to about 2 weight percent of the emulsion.
11. The emulsion of claim 1, wherein the metal utensil is made of a metal having shape memory properties and immersion of the cutting edge of the utensil in the emulsion is sufficient to allow the metal to recover a previous molecular arrangement of its shape memory properties.
12. The emulsion of claim 1, wherein immersion of the cutting edge of the utensil in the emulsion is sufficient to maintain a chromic oxide protective film on the cutting edge.
13. The emulsion of claim 1, wherein immersion of the cutting edge of the utensil in the emulsion is sufficient to prevent formation of iron oxide on the surface of the cutting edge.
14. An emulsion for preserving the cutting edge of a utensil, the emulsion comprising: soap base, sodium sulphate lauryl ether, ketostearic alcohol, cetyltrimethyl ammonium chloride, anhydrous lanolin, liquid glycerin, and triethanolamine in combined amounts effective to preserve the edge of the utensil when immersed therein.
15. The emulsion of claim 14, wherein the soap base is present in an amount between about 5-15%, sodium sulphate lauryl ether is present in an amount between about 3 to 7%; the ketostearic alcohol is present in an amount between about 2 to 4%; the cetyltrimethyl ammonium chloride is present in an amount between about 2 to 4%; the anhydrous lanolin is present in an amount between about 3 to 7%; the glycerin is present in an amount between about 3 to 7%; triethanolamine is present in an amount between about 0.5 to 1.5.

16. The emulsion of claim 15, which further comprises an additive selected from the group consisting of: aloe vera glycolic extract; propolis glycolic extract; propylene glycol; methyl parabene; hydrolyzed wheat oil; hydrolyzed soya oil; fragrance; mineral oil and coloring agent, or any combination thereof.

17. The emulsion of claim 16, wherein the aloe vera glycolic extract is present in a proportion between about 1 to 3%; the propolis glycolic extract is present in a proportion of between about 1 to 3%; the propylene glycol is present in a proportion of between about 0.3 to 0.7%; the methyl parabene is present in a proportion between about 0.1 to 0.3%; the hydrolyzed wheat oil is present in a proportion of between about 0.3 to 0.7%; the hydrolyzed soya oil is present in a proportion of between about 0.3 and 0.7%; the fragrance is present in a proportion of between about 0.3 and 0.7%; the coloring agent is present in a proportion of about 0.01%.

18. The emulsion of claim 16, comprising sodium sulphate lauryl ether, liquid glycerin, triethanolamine, aloe vera glycolic extract; propolis glycolic extract; fragrance; propylene glycol; methyl parabene; coloring agent; and water.

19. The emulsion of claim 16, wherein the glycerin is present in a proportion of about 3 to 7%, the aloe vera glycolic extract is present in a proportion of about 1 to 3%, the propolis glycolic extract is present in a proportion of about 1 to 3%, the fragrance is present in a proportion of about 0.3 to 0.7%, the triethanolamine is present in a proportion of about 1 and 3%, the propylene glycol is present in a proportion of about 0.3 to 0.7%, the methyl parabene is present in a proportion of about 0.1 to 0.3%, the propyl parabene is present in a proportion of about 0.1 to 0.3%, the color is present in a proportion of about 0.01%.

20. The emulsion of claim 16, wherein the sodium sulphate lauryl ether is present in an amount of about 15 to 25%.

21. The emulsion of claim 15, wherein the cetyltrimethyl ammonium chlorate is present in an amount of about 15 to 25%

22. A method for preserving the cutting edge of a utensil, the method comprising the steps of:

preparing an emulsion that includes at least one of a water-soluble salt of an ether compound or a chloride compound in an amount sufficient to maintain oxide portions of the cutting edge, a hydrophobic substance in an amount sufficient to reduce water contact with the cutting edge of the utensil; and an alcohol in an amount sufficient to assist in solubilizing the hydrophobic substance, and

immersing the cutting edge of the utensil in the emulsion to preserve the sharpness of the cutting edge to facilitate longer service of utensil.

23. The method of claim 22, further comprising mixing and homogenizing the edge preservation compound, the hydrophobic substance, and alcohol to form an emulsion; and allowing the homogenized emulsion to stand for about 24 to 32 hours prior to immersion of the edge into the emulsion.

24. The method of claim 22, wherein the water-soluble salt of an ether compound is sodium sulphate lauryl ether.

25. The method of claim 22, wherein the chloride compound is cetyltrimethyl ammonium chloride.

26. The method of claim 22, wherein the hydrophobic substance is selected from the group consisting of: soap base, anhydrous lanolin, liquid glycerin, and any combination thereof.

27. The method of claim 22, wherein the alcohol is selected from the group consisting of: triethanolamine, ketostearyl alcohol, and a combination thereof.

28. The method of claim 22, wherein the emulsion further comprises a component selected from the group consisting of aloe vera glycolic extract; propolis glycolic extract; propylene glycol; methyl parabene; hydrolyzed wheat oil; hydrolyzed soya oil; fragrance; coloring agent, and any combination thereof.

29. The method of claim 22, wherein the emulsion further includes a reagent for reducing the deposition of oxide on the metal.
30. The method of claim 29, wherein the reagent is a lubricant.
31. The method of claim 29 wherein the reagent is present in an amount between about 0.5% to 2.0 % of the weight of the emulsion.